

## REMARKS

### INTRODUCTION

In accordance with the foregoing, claims 1-9, 11, 12 and 16-18 have been amended. Claims 19-21 have been cancelled. Claims 1-12 and 14-18 are pending and under consideration.

### CLAIM REJECTIONS

Claims 1-12 and 14-21 were rejected under 35 USC 102(e) as being anticipated by Chapin (US 2003/0231328) (hereinafter "Chapin").

#### Claims 1-6

Amended claim 1 recites: "A printer to perform a printing operation by driving hardware provided thereto according to a printing command received from a user, comprising: a firmware unit to store function information of a plurality of printer models, supported by a common firmware, of the printer, and control the printer to selectively perform the function of one of the plurality of printer models which corresponds to a model index designated by a manufacturer as the printer is initialized, and wherein the common firmware is a multi-model firmware that can be used in the plurality of printer models."

The Office Action relies on Chapin to show these features of claim 1, and specifically relies on Figures 1 and 2 of Chapin to anticipate the above-noted features of claim 1.

Claim 1 has been amended to clarify that a printer is being claimed, and the printer which performs a printing operation includes a firmware unit to store function information of a plurality of printer models. The Office Action relies on the driver 100 installed on host device to show the firmware unit of claim 1, and further includes a note that "printing apparatus" (the former language of claim 1) was interpreted to read on the computer 110, network 120 and printers 130-134 of Chapin. In its present form, it is respectfully submitted that claim 1 clearly recites a printer, and therefore components such as the driver 100 in the computer 110 do not correspond to the printer of claim 1. To the contrary, if there was a component of Chapin to correspond to the printer of claim 1, it would be the printers 130, 132 and 134 of Chapin.

It is well settled that where a patentee uses a claim preamble to recite structural limitations of the claimed invention, the Patent Office give effect to that usage. See *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 9 USPQ 2d 1962, 1966 (Fed. Cir. 1989).

In the present case, it is respectfully submitted that the printer recited in claim 1 which performs a printing operation includes a firmware unit to store function information of a plurality of printer models.

These technical features of claim 1 provide that a plurality of series-models can be supported through a single firmware by adding a model index function and a model index command designating the function in the firmware of the printer, instead of separately developing a firmware for each of the series-models having similar functions. It is further respectfully submitted that this technical problem is not even addressed in Chapin.

Claims 2-6 depend on claim 1 and are therefore believed to be allowable for at least the foregoing reason. Further, claims 2-6 recite features that patentably distinguish over Chapin. For example, claim 2 recites that the firmware unit comprises: a storage unit to store the function information of the plurality of printer models therein; a model index processing unit to store a model index designation command received from outside the firmware unit, extract from the storage unit the function information which corresponds to the model index designated by the model index designation command upon the initialization of the printer, and output the extracted function information; and a firmware driving unit to control the hardware to receive the function information and perform a corresponding function. Even if it could be argued that the printers 130, 132, 134 of Chapin inherently contain a firmware unit – which does not appear to be discussed in the disclosure of Chapin – Chapin does clearly discuss that the object of Chapin, as discussed in paragraph [0007] of Chapin, is for the multiple printer driver to determine which printer is best equipped to print each print job. Accordingly, since Chapin relies on selecting one of a group of printers to perform a print job based on the predetermined functionality of the printer, the printers of Chapin would not need storage units to store the function information of a **plurality of printer models** therein as recited in claim 2.

Withdrawal of the foregoing rejections is requested.

#### **Claims 7-10**

Amended claim 7 recites: "...inputting a model index designation command and storing the command in a file of a printer in which the common firmware is installed, during a manufacturing operation; confirming a model index designation command which designates a model index corresponding to one of the plurality of printer models on performing an initialization of the printer; extracting function information corresponding to the one of the plurality of printer models which is designated by the model index designation command; confirming a function of the designated model using the function information; and performing the function, and wherein

the common firmware is a multi-model firmware that can be used in the plurality of printer models.”

Similar to the argument for claim 1, it is respectfully submitted that these features are not anticipated by Chapin.

Claims 8-10 depend on claim 7 and are therefore believed to be allowable for at least the foregoing reason.

Withdrawal of the foregoing rejection is requested.

**Claims 11 and 17**

Amended claim 11 recites: “...wherein the common firmware is a multi-model firmware that can be used in the plurality of printer models.”

Similar to the argument for claim 1, it is respectfully submitted that these features are not anticipated by Chapin.

Claim 17 depends on claim 11 and is therefore believed to be allowable for at least the foregoing reason.

Withdrawal of the foregoing rejection is requested.

**Claims 12 and 14-16**

Amended claim 12 recites: “...wherein the common firmware is a multi-model firmware that can be used in the plurality of printer models.”

Similar to the argument for claim 1, it is respectfully submitted that these features are not anticipated by Chapin.

Claims 14-16 depend on claim 12 and are therefore believed to be allowable for at least the foregoing reason.

Withdrawal of the foregoing rejection is requested.

**Claim 18**

Claim 18 recites: “...storing function information of a plurality of printer models, supported by a common firmware, of the printer in the printer...”

Similar to the argument for claim 1, it is respectfully submitted that this feature is not anticipated by Chapin.

Withdrawal of the foregoing rejection is requested.

**Claims 19-21**

Claims 19-21 have been cancelled.

**CONCLUSION**

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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Date: September 2, 2010

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